

ETH

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich



inf | Informatik
Computer Science

WS & SOA WS Extensions

FS 2009



BPEL Revisited

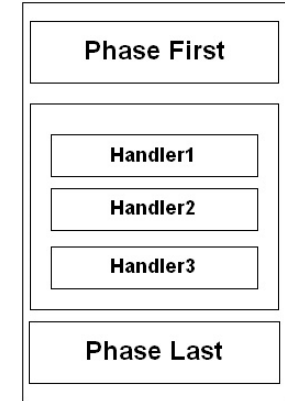
- Many people had problems
 - Eclipse tools creates incorrect BPEL files
 - Can be fixed easily
 - By comparing with the examples coming with the ODE distribution
 - More details in the demo NOW

WS Extensions

- Presented in the lecture (“intermediaries”)
- Modify SOAP message
 - Add custom headers
 - Transform body
- Extensions for Security, Addressing, Routing... are standardized
- Users can create their own extensions
 - By writing message handles conforming to axis' API

Axis2 Extensions

- Implemented as *handlers*
 - Execution order of handlers is defined as *phases*
- One or more handlers are bundled into *modules*
- Bound to services (configured in services.xml)
- Hook into the *In Pipe* and *Out Pipe* of Axis
 - Allow access to the raw message
 - Message passes through all phases (handlers)

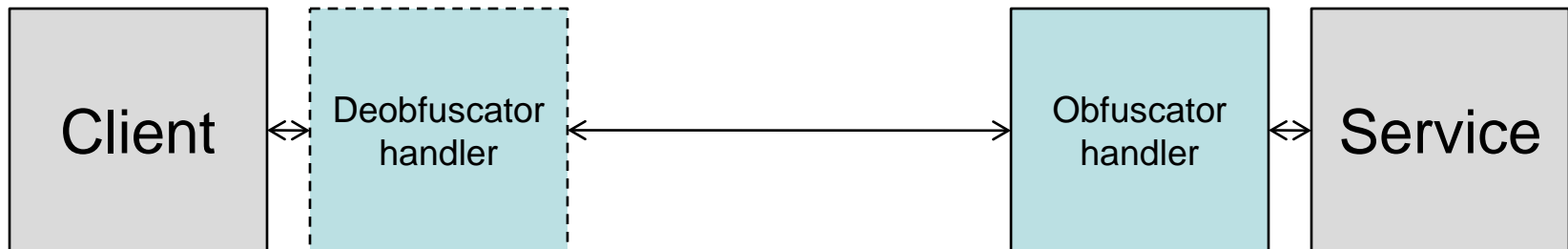


Examples and Tutorials

- Logging module
 - http://ws.apache.org/axis2/1_1/modules.html
- Counter module
 - <http://blogs.deepal.org/2009/02/writing-axis2-module.html>

Exercise 8

- Create a spam protection extension



OPTIONAL:

- Replaces all occurrences of “_AT_” in message body with “@” if header flag is set

MANDATORY:

- Replaces all occurrences of “@” in message body with “_AT_”
- If at least one replacement was made, add a new SOAP header serving as a flag

Administrative Stuff

- Latest submission of BPEL and Extension exercises: 2009-04-30
- Remember that you need to do a project as well

Project – Organization

- groups of 4 – 6 students: merge two groups
- proposal
 - outline of what you plan to do in the project
 - needs to be approved by us
- presentation: 2009-05-19
- report: due 2009-05-22
 - summarizes your project

Project – Task

- use the technologies enjoyed/learned/struggled with/cursed/... in the exercises
- build an interesting application from at least
 - three different Web services
 - one self-made extension/intermediary service
- the application must itself exhibit a Web service interface and be deployed on ikp8 and its UDDI

Project – Groups and Proposal

- send us a proposal as soon as possible so you can start working on the project
 - project title
 - group members (should be merger of existing groups)
 - outline of the planned application, including
 - services to use
 - extensibility module to be implemented
- we will review the proposal and approve it

Project – Presentation

- 2009-05-19, 13:15 – 15:00
- presentation of 5 – 8 minutes (max!)
 - brief outline of your project
 - particular challenge(s) and lessons learned
 - live demo
- you will need to connect to a projector, so...
 - be prepared for the “\$&%@§ projector” experience
 - time will be deduced from your 8 minutes slot 😊

Project – Report

- summarize your project
 - outline
 - challenges and lessons learned
 - implementation details
- 4 – 8 pages
- handed in as PDF by 2009-05-22

References

- http://www.developer.com/java/web/article.php/10935_3529321_2
- http://ws.apache.org/axis2/1_1/modules.html
- http://ws.apache.org/axis2/1_1/Axis2ArchitectureGuide.html#bmc core

Internships in India (Accenture)

- If you are interested in an internship in India, please, contact: donaldk@inf.ethz.ch
- Duration: Juni - September 2009 (no classes)
- Places: Bangalore, Chennai oder Hyderabad
- Requirements
 - doing well with regard to your study plan
 - English
 - Programming languages: Java, SQL
 - Bachelor and Master students
- This is an adventure!!!
 - (I would do it myself, if I met the requirements.)